

South Carolina Department of Education Support for Implementing the Common Core State Standards for Mathematics

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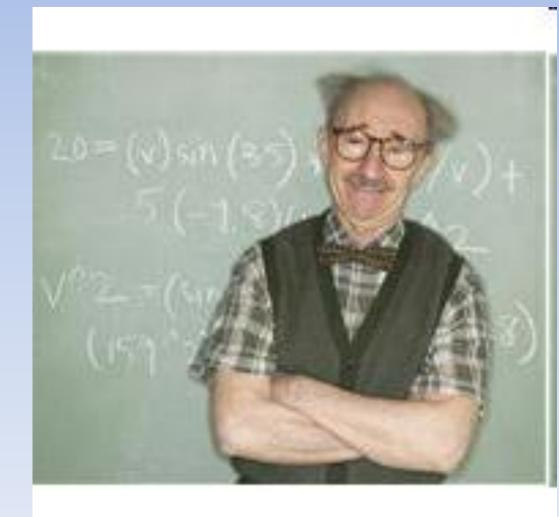
February, 2012 - Regional

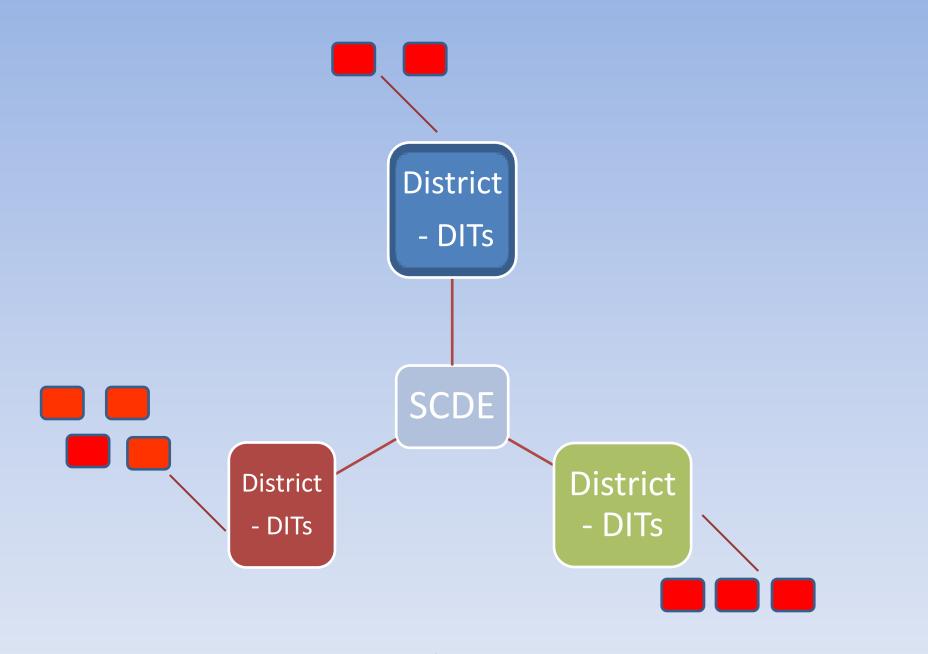


Office of Teacher Effectiveness Content Knowledge Team

"STEM" - Science, Technology, Engineering and Mathematics

Introductions Presenters Table Teams





Building Capacity for Implementation

Purpose for Today's Session

1. Dig Into the Standards

- "Take Aways" for Today's Session
- A. Better understanding as to how the standards can be "condensed" for teaching and a process to do so.
- B. Understanding of how today's experience supports implementation.

Questions to be Addressed Today



- 1. What are the mathematical concepts contained in the CCSSM?
- 2. What are the standards that support each concept?
- 3. How do the standards that support each concept relate to form terminal and supporting objectives Learning Goals?
- 4. How does this support implementation?

Informational Updates and a Quick Review

1. Timeline and Assessment Status

2. Format of Standards - "Delineation"

3. Concepts, Content and Instructional Approaches

Implementation Timeline

2011 – 2012 Professional Development

2012 – 2013 Professional Development

2013 – 2014 Bridge Year

2014 - 2015

Full Implementation



Where are SC districts with regard to transition to the Common Core State Standards for mathematics?

- ⇒ Started last year with a grade(s) or concept(s) -- 10%
- ⇒ Started this year with a grade(s) or concept(s) -- 40%
- ⇒ Still in the planning stage -- 51%

ASSESSMENT

At the State Board of Education meeting on February 8, 2012 the Board accepted the Department of Education's recommendation to go with Smarter Balanced as the assessment provider.

www.k12.wa.us/smarter

Organization of Standards



Domains (Strands)

United States

Cluster Headings (**Standards**)

South Carolina

Standards (Indicators)

Columbia

Drilling Down

Organization - Broad to Specific

Critical/Focus Areas

Domains

Cluster Headings

Standards

Reflecting on Organization

5th Grade – In what Domain(s) would you find Division?

8th Grade - In what Domain(s) would you find simultaneous linear equations?



Constructing Understanding How to label...



6.RP.1

- 6 = 6th Grade
- RP = Ratios and Proportional Relationships (Domain)
- 1 = The cluster piece in that Domain

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Examples of mathematical concepts...



What does terminal objective mean to you?

How does that differ from supporting actions/objectives?



5.G.1 What is the <u>concept</u> being addressed?

What is the <u>terminal</u> <u>objective</u>?

What are the required supporting actions?

Concept – Coordinate Plane

Graph Points on a Coordinate Plane 5.G.1
 First quadrant only 5.G.2

Define a coordinate system

Use terms axis, perpendicular number lines and origin, ordered pairs, coordinates

Demonstrate how the number lines intersect at (0, 0) – the origin

Understand direction of x and y coordinates and relationship to origin

Solve real world and mathematical problems 5.G.2
 Interpret coordinate values of points in context

Domains, cluster headings Basis for long range plans

Geometry – 5th Grade Long range plan

- Graph points on the coordinate plane to solve realworld and mathematical problems
- Classify two-dimensional figures into categories based on their properties.

Concepts, Terminal Objectives, Supporting Actions
Basis for short range plans

Concept – Coordinate Plane

Graph Points on a Coordinate Plane 5.G.1
 First quadrant only

Define a coordinate system

Use terms axis, perpendicular number lines and origin, ordered pairs, coordinates

Demonstrate how the number lines intersect at (0, 0) – the origin

Understand direction of x and y coordinates and relationship to origin

Solve real world and mathematical problems 5.G.2
 Interpret coordinate values of points in context

GRADE LEVEL TEAM WORK

- Stand by the grade level in which you prefer to work
- Will be divided into smaller teams
- Smaller teams will work together to identify:

Concepts (identify all related standards)

Terminal Objectives

Supporting Actions/Objectives

- Small teams will combine with same grade level teams to compare work and reach consensus
- Compare to already prepared documents
- Share feedback
- Address how this experience supports implementation
- Vertical articulation of concepts if time permits



How does today's experience support implementation?

What questions do you have about today's experience?

What questions do you have about replicating this experience in your districts?



Next steps...

Have teachers work in grade bands to develop a vertical articulation document. As they meet to discuss vertical articulation, have them begin conversations related to gaps in learning that will occur as they transition from 2007 to CCSS.

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